The "Weekly Petroleum Status Report" is published each Friday by the Energy Information Administration. The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday.

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The Weekly Petroleum Status Report (WPSR) provides timely information on the petroleum supply situation. It presents current statistics in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policymakers, consumers, analysts, and State and local governments.

### Highlights

## Refinery Operations

Crude oil inputs to refineries averaged 12.0 million barrels a day for the week ending November 19, 1982. Refinery capacity utilization averaged 72.0 percent during the week. During the four weeks ending November 19, 1982, motor gasoline production averaged 6.2 million barrels a day, and distillate fuel oil production averaged 3.0 million barrels a day.

#### Stocks

On November 19, 1982, stocks of crude oil stood at 359.4 million barrels, which is about 2 percent below the level of one year ago. Stocks of motor gasoline, at 225.2 million barrels, were about 8 percent below the level a year ago. Distillate fuel oil stocks stood at 175.3 million barrels, which is about 13 percent below the level a year ago. Stocks of residual fuel oil stood at 62.8 million barrels, which is about 22 percent below the level a year ago.

#### **Imports**

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) and petroleum products together averaged 4.1 million barrels a day for the four weeks ending November 19, 1982, about 20 percent below their average a year ago. Gross imports of crude oil (excluding the Strategic Petroleum Reserve) averaged 3.4 million bailels a day for the four-week period ending November 19, 1982.

#### **Products Supplied**

Total petroleum products supplied averaged 14.8 million barrels a day for the four-week period ending November 19, 1982, which is about 6 percent lower than during the comparable period last year. Motor gasoline was supplied at a rate of 6.5 million barrels a day, which is slightly above the level supplied a year ago. Distillate fuel oil was supplied at a rate of 2.6 million barrels a day, which is about 10 percent below the rate one year ago.

#### Crude Oil Price

The estimated weighted average international price of crude oil for November 1982 remains at \$33,03 a barrel.

### **Spot Market Product Prices**

For the week ending November 19, 1982, the average spot market price of 98 octane gasoline on the Rotterdam market decreased \$2.11 to \$36.11 a barrel; the gasoil price decreased \$1.47 to \$38.81 a barrel, and the price of residual fuel oil decreased \$1.87 to \$26.88 a barrel. On the New York market, the average spot price of 89 octane regular gasoline decreased \$1.54 to \$37.02 a barrel; the price of No.2 heating oil decreased \$1.47 to \$38.85 a barrel, and the residual fuel oil price decreased \$2.00 to \$28.00 a barrel.

## Contents

U. S. Petroleum Balance Sheet
Refinery Departions U.S. Refinery Production by Product
Stocks of Crude Dil and Petroleum Products, U.S. Totals
Imports Imports of Crude Oil and Petroleum Products
Use
Prices World Crude Oil Prices
Appendices:  A: EIA Weekly Data: Data Collection and Method of EstImation
Definitions

	Four-Week A			Dally	lative Averages	
	For Period ( 11/19/82	LNa1119 L1/19/81	Percent Change	322 1982	! Days 1981	Percent Change
Crude Oil Supply ,			···		<del></del>	
1) Bomestic Production 2	EB,687	8,578		E8,665	0,570	1.1
1) Domestic Production <sup>1</sup> 2) Net Imports (Including SPR) <sup>2</sup> 3) Gross Imports (Excluding SPR) 4) SPR Imports 5) Exports 6) SPR Stocks Withdrawn (+) or Added (-) <sup>3</sup> 7) Other Stocks Withdrawn (+) or Added (-) <sup>3</sup> 8) Used Directly and Losses 9) Unaccounted-for Crude	3,198	3,905		3,211	4,205	-23.6
3) Gross Imports (Excluding SPR) 4) SPR Imports	3,404 99	3,829 336		3,286	4,171	-21.2
5) Exports	E304	259		164 E239	264 230	4.2
SPR Stocks Withdrawn (+) or Added (-) ,	-105	-347		-174	-347	7.2
') Other Stocks Withdrawn (+) or Added (-)	-85	-136		13	47	
B) Used Directly and Losses	E-59	-67		E-64	-62	
)) Unaccounted-for Crude	190	242		190	79	
10) Crude Oil Input to Refineries	11,834	12,175	-2.0	11,840	12,491	-5.2
Other Supply						
1) NGL Production	EI,543	1,619		E1,537	1,610	-4.5
Other Hydrocarbon Input     Crude Used Directly as Product	E57 57	57 63		E52	51	2.0
A) Processino Gain	562	540		61 529	<b>5</b> 8 500	
5) Net Product Imports <sup>4</sup> .	877	1,199		9 <b>2</b> 8	1,230	5.9 -24.5
6) Gross Product Imports <sup>4</sup>	1,431	1,654	-13.4	1,486	1,585	-6.3
7) Product Exports _	E554	455	21.0	£550	355	57.2
B) Product Stocks Withdrawn (+) or Added (-) <sup>5</sup>	-126	22		286	85	
9) Total Product Supplied for Domestic Use	14,805	15,675	~5.5	15,233	16,023	-4.9
roducts Supplied						
0) Motor Gasoline	6,470	6,446	0.4	6,544	6,587	-0.6
Naphtha-type Jet Fuel     Kerosene-type Jet Fuel	198	187	5.6	208	200	3.7
3) Kerosene	903 179	777 146	16.3 22,5	805 128	811 119	-0.7 7.1
3) Kerosene 4) Distillate Fuel Oil	2,555	2,852	-10.4	2,691	2,790	-3.5
5) Residual Fuel Oil	2,555 1,344	1,900	-29.2	1,688	2,079	-18.8
6) Other Oils	3,157	3,366	-6.2	3,169	3,438	-7.8
7) Total Products Supplied	14,805	15,675	-5.5	15,233	16,023	-4.9
troleum Stocks	***************************************			<del></del>	Percent Ch	ange from
illions of Barrels)	11/19/02	1	11/12/82	11/19/81	Previous Week	
Crude Oil (Excluding SPR) <sup>6</sup>	359.4		R346.5	365.2	3.7	-1.6
Motor Gasoline'	225.2		R227.2	243.5	-0.9	-7.
Naphtha-type Jet Fuel	5.6		R5.7	6.7	-1.3	-16.
Kerosene-type Jet Fuel Kerosene	33.3		R35.2	35.6	-5.2	-6.
Distillate Fuel 01]	11.4		11.2	12.5	1.1	-8.
Residual Fuel Off	175.3 62.8		R171.5 62.9	200.5 00.8	2.3	-12.0
Unfinished 011s Other Oils	112.3		R114.4	117.6	-0.1 -1.9	-22. -4.
Other Oils <sup>8</sup>	£171.9		E172.5	213.0	-0.4	-19.
	1.167.9	D	1 147 1	1 276 4	0.0	. 6 1
Total Stocks (Excluding SPR) Crude Oil in SPR Total Stocks (Including SPR)	1,157.2 206.3	R	281,147.1 286.2	1,275.4 219.4	0.9 0.0	-9.3 30.5

R≖EIA revision.

E=Estimate based on monthly data.

l Includes lease condensate.

Net Imports = Gross Imports (line 3) + SPR Imports (line 4) - Exports (line 5). 2 Net Imports = Gross Imports (line 3) + SPR Imports (line 4) - Exports (line 5).
3 The December 1980 crude oil stocks level used in the calculation of the 1981 "Other Stocks Withdrawn or Added" is the 1981-basis crude oil stock level published in the 1981 "Petroleum Supply Annual" (380.2 million barrels). The difference between the 1980- and the 1981-basis crude oil stock levels is the inclusion of crude oil in transit from Alaska in the figures for January 1981 forward. The Oecember 1980 crude oil stock level shown on page 6 is the 1980-basis figure published in the 1980 "Petroleum Statement, Annual" and is consistent with other 1900 figures shown.
4 Includes unfinished oils and natural gas plant liquids for processing.
5 Includes an estimate of minor product stock change based on monthly data.
7 Includes stocks of finished motor gaspline and stocks of motor gaspline bleadles stocks of finished motor gaspline and stocks of motor gaspline bleadles stocks. The Oecember

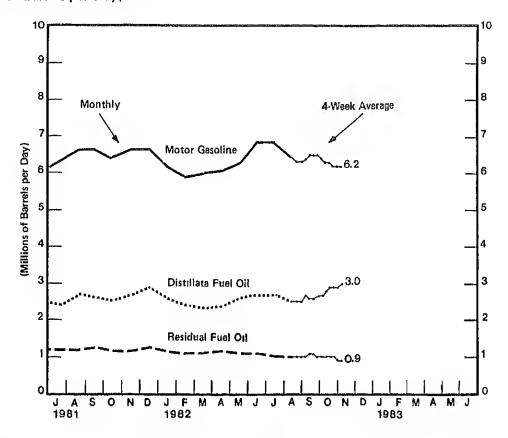
<sup>7</sup> Includes stocks of finished motor gasoline and stocks of motor gasoline blending components.
8 Included are stocks of all other oils such as aviation gasoline, natural gas liquids (including ethane), petrochemical feedstocks, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils. For the current two weeks, stocks of these minor products are estimated from monthly data.

 <sup>1980:</sup> EIA, "Petroleum Statement. Annual (Final Summary)."
 1981: EIA, "Petroleum Supply Annual,"
 January-August 1982: EIA, "Petroleum Supply Monthly."
 September 3, 1902-Current Week: Estimates based on EIA weekly data.

Note: Oue to independent rounding, individual product detail may not add to total. The percentages shown are calculated using unrounded numbers.

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U.S. Refinery Production by Product (Millions of Barrels per Day)

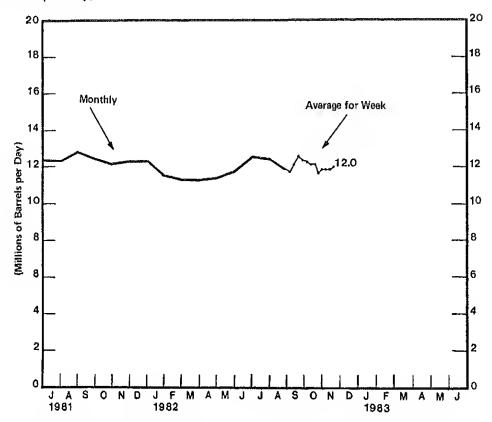


Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jui	Aug	Sep	Oct	Nov	Dec
1980	•	· · · · · · · · · · · · · · · · · · ·										
Motor Gasoline	7.0	6.9	6.6	6.3	6.3	6.6	6.4	6.4	6.4	6.1	6.5	6.6
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0،1	0.1	0.2
Distillate Fuel	3.0	2.8	2.6	2.5	2.5	2.6	2.7	2.6	2.7	2.6	2.7	2.9
Residual Fuel	1.8	1.8	1,6	1.6	1.5	1.6	1,5	1.4	1.5	1.5	1.6	1.7
1981 <sup>1</sup>												
Motor Gesoline <sup>2</sup>	6.7	6.3	6.2	6.1	6.1	6.2	6.4	6.6	6.6	6.4	6.6	6.6
Jet Fuel	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	0.9
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0,1
Distillate Fuel <sup>2</sup>	3.0	2.8	2.5	2.4	2.5	2.5	2.4	2.7	2.6	2.5	2.7	2.9
Residuel Fuel <sup>2</sup>	1.6	1.6	1.4	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1,3
1982 <sup>1</sup>												
Motor Gasoline <sup>2</sup>	6.2	5 <b>.9</b>	6.0	6,1	6,3	6.8	6.8	6.4				
Jet Fuel	0.9	1,0	1.1	1.0	0,9	0.9	1.0	1.0				
Kerosene	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1				
Distillete Fuel 2	2,6	2.4	2.3	2,4	2.6	2.7	2.7	2,6				
Residual Fuel <sup>2</sup>	1.2	1.1	1.1	1.2	1.1	1,1	1.0	1.0				
Average for Four-	Week Pa	eriad End	ina:									
1982 <sup>1</sup>	9/3	9/10	9/17	9/ <b>2</b> 4	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
Motor Gasoline <sup>2</sup>	6.3	6,3	6.4	6.6	6.5	6.5	6.4	6.3	6.3	6,2	6.2	6,2
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Karosana	0,1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0,2	0.2	0.2
Distillate Fuel <sup>2</sup>	2.5	2.5	2.7	2.6	2.6	2.7	2.7	2.8	2.9	2.9	2.9	3.0
Residuel Fuel <sup>2</sup>	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9
nesiduai Fuel	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9

<sup>1</sup> Production statistics represent not production (i.e., refinary output minus refinary input)
2 Production statistics for 1981 and 1982 should not be directly compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation.

Source: • 1980: EIA, "Petroleum Statemant, Annual (Final Summary)."
• 1981: EIA, "Patroleum Supply Annual."
• Jenuary—August 1992: EIA, "Petrolaum Supply Monthly"
• Septamber 3, 1982—Current Week: Four-week averages based on EIA weekly data.

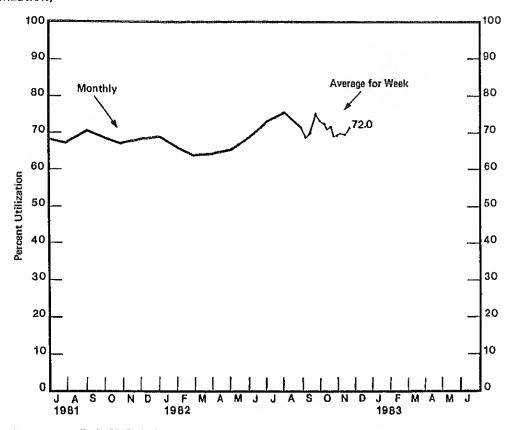
## Crude Oil Inputs to Refineries (Millions of Barrels per Day)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	14.3	14.2	13.7	13.5	13.3	13.7	13,3	13.0	13.3	<b>12.</b> 8	13.1	13,6
1981	13.2	12.9	12.4	12.1	12.3	12.4	12.3	12.9	12.5	12.1	12,3	12.3
1982	11.6	11.3	11.3	11.4	11.8	12.5	12.4	11.9				
Average fo 1982	or Week En 9/3	ding: 9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
	11.8	12.1	12.6	12.4	12.3	12,1	12.1	11.6	11.8	11.8	R11.8	12.0

R-EIA revision.
Source: e 1980: EIA, "Petroleum Statement, Annual (Final Summary),"
e 1981: EIA, "Petroleum Supply Annual,"
e January—August 1982: EIA, "Petroleum Supply Monthly,"
e September 3, 1992—Currant Week: Estimater based on EIA weekly deta.

## apacity Utilization ilization)



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
82,1	79.9	76.8	75.7	74.8	77.0	74.5	72.7	73.6	70.8	73,0	75.5
72.5	70.8	67.7	65.7	67.2	68.1	67.4	70.8	68.4	67,0	68.2	69.2
66.3	64.6	64.9	65,5	68.0	73.6	75.2	71.6				
Neek En 9/3	ding: 9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
68.7	70.0	75.2	73.5	72.8	71.8	72.1	69.5	69.9	70.0	R69.9	72.0

EIA, "Petroleum Statement, Annual (Final Summary),"
EIA, "Petroleum Supply Annual,"
—August 1992: E)A, "Petroleum Supply Monthly."
ber 3, 1982—Current Week: Estimates based on EIA weekly data.

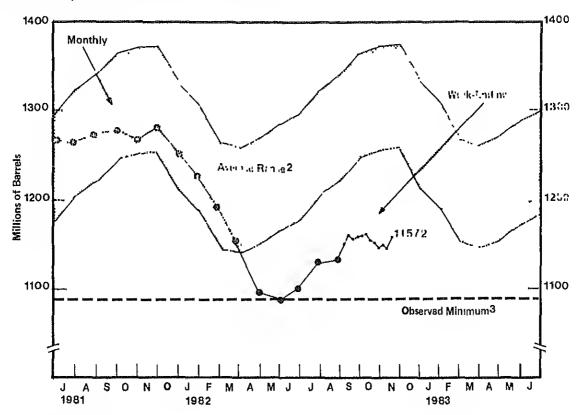
oduct	Jan	Feb	Mar	Apr	May	Jun	Jul	Auŋ	Sep	Oct	Nov	Dec
<sub>011</sub> 2.3	357.5	366 0	367 4	379 8	383 4	301 5	378 7	387 2	375.4	378.5	373.1	358 2
Sasoline	262,1	274.4	282,7	271.0	283.1	264.8	260.7	259.0	250,1	246 4	257,2	261.3
	38 4 14 0	38 3	38.7	39,3	413	42,3	40.9	403	42,2	43,1	43,8	420
e Fuel Oil	212.4	13 3 191 6	13.1 177.8	13 4 177 2	13 8 183 4	13,9 108.5	14.3 213,8	13 3 225,3	12.9 232.4	12.5 225.7	12.7 222.4	11 6 205 1
Fuel Oil	97.2	91 0	88 3	85 3	07.7	87 8	85,6	88.9	87.8	810	93 2	018
ed Olls	1124	111,3	115.9	123 5	130 6	133.1	131.5	129.6	132.1	131.1	1263	1239
ils	165 0	166,3	172 7	185 6	192.4	190,8	208,5	214.7	2124	<b>2</b> 04.8	201 4	190 5
ocks (Excl. SPR)	1,260 0	1,252.1	1,2567	1,275,9	1,295.6	1,319 7	1,334 2	1,357.4	1,3543	1,333.0	1,330.1	1,264 4
ll in SPR ocks (Incl. SPR)	81 2 1,351 2	91.2 1,343,3	91 2 1,347 8	91,2	91.2	91 2	91.2	91.2	928	85.6	102.3	107 8
icks (inc., arm)	1,301 2	1,343,3	1,347 8	1,357 1	1,388.8	1,410.9	1,425,4	1,448.0	1,447 2	1,420.7	1,432.4	1,392.2
ll <sup>2</sup>	374.0	370,2	393.0	397 5	393,7	364.7	385.9	382,0	358.0	364.0	388.0	363.5
asoline4	276.1	284,0	285.0	272.1	258.3	2418	227,7	233 3	237.1	235.1	248.4	253.0
	39.5	38 6	30 0	40 4	44.5	44.9	44.8	44 7	43.1	42.7	42.0	41.1
) : Fuel	10.5 179 4	10 8 172,5	11.2 164.3	12 0 154 6	12.8 171.8	134	133	138	13,9	12.7	12.3	11.0
Fuel	82.1	77,9	74.8	154.6 72 9	78.1	179 9 59.4	186,3 6 <del>9</del> 3	200 2 74.9	207 3 80.2	201.2 79.9	200,1 81.4	191 5 78 0
ed Oils	121,5	122.3	126 2	126 5	128.3	128.1	126.1	124.5	118.4	119.5	116.4	111.3
ls	192.2	188.5	186.9	194,5	202.7	207,1	212.1	218.0	220,7	2140	212,3	203.9
ocks (Exct. SPR)	1,275.3	1,272.5	1,280.3	1,280,5	1,288 3	1,267.1	1,285.4	1,272.5	1,276 7	1,270.0	1,278.9	1,2533
ll in SPR	112.5	118.1	120.9	134 2	160.1	163.1	173 1	184.7	199.2	214.8	222.5	230,3
ocks (Incl. SPR)	1,387.8	1,388.5	1,401.2	1,414.8	1,438.3	1,430,2	1,438.5	1,467.2	1,478.0	1,464.8	1,501.5	1,403.5
11 <sup>2</sup>	370 9	371 0	365,7	355.5	348 5	342.8	344,8	361.6				
iasolina <sup>4</sup>	252 1	252 1	247.9	222 8	214 9	219 7	226.0	225 0				
	37 2	37.0	42.5	44 1	418	40.1	398	40 8				
e	98	9 1	88	96	8.9	9.2	9 1	95				
Fuel	168.0	146.7	127 7	1088	114,5	124 5	148.1	158.9				
Fuel Oil	80.2	58.1	57 3	53 5	59,1	60.5	59.O	52.8				
ed Olls IIs	118.7 105.0	116.9 189.3	115,8 186,5	110 9	117.9	117 5	117.8	115.0				
ocks (Excl. SPR)	1,225 5	1,190.2	1,1524	180 9 1,094 3	182,8 1,088,4	183 7 1,098.1	182.4 1,128.8	178,1 1,133.8				
II In SPR	238.3	241.2	248 5	255 5	261.0	264 1	257.2	273.8				
ocks (Incl. SPR)	1,450.9	1,431 4	1,400.9	1,349.9	1,349 4	1,382.3	1,393.9	1,407.4				
nding:	8/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/6	11/12	11/19
<sub>   2</sub>	355 4	359,8	353.5	357.5	357 4	357.9	349 8	367.0	355 7	354.2	R348.5	359.4
Sasoline <sup>4</sup>	223 8	225.1	225.5	228.0	230 5	231.2	229 0	228.5	228 7	227,5	R227.2	225 2
	39 9	39.4	39.7	40 1	39.7	37.8	38 9	40.1	399	40.7	R40.9	38 9
0	10.1	10.1	10 0	10 2	10 2	10.7	10 7	10.5	10.5	11.0	11.2	11.4
Fuel Oil	158.2	159.2	158 0	158.7	154.5	158.2	151.6	182.9	163,6	187 8	R171.5	175.3
Fuel Oll	61.5	54.0	55.8	578	80.8	60.4	50.9	61.7	81.7	51 9	82,9	82.8
ed Olls   45	118.7 E1950	119.0 E1953	1183 E1955	117. <b>7</b> E187 1	118.8 E187.4	119.0 E186.1	1178	115.2	113.3	112.4	R114 4	112.3 E171.9
ocks (Excl. SPR)	1,150 5	1,181.8	1,158.3	1,158.0	1,159.3	1,161.3	E184.8 1,153 1	E175.4 1,151 3	E 174.1 1,147 6	E173.1 1,148.5	E172.5 R1,147.1	1,157.2
II in SPR	273.9	274.7	275,5	276.8	277 8	278 7	280 8	283.4	284 3	284.9	286 2	286.3
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evisions sted. See definition of "Stock Change (Refined Products)" for explanation, of stocks include those stocks held at refineries, in pipelines, and at major bulk terminals. Stocks held at assured gas processing plants are included in "Other Olis" and in totals, it lavels are as of the end of the period.

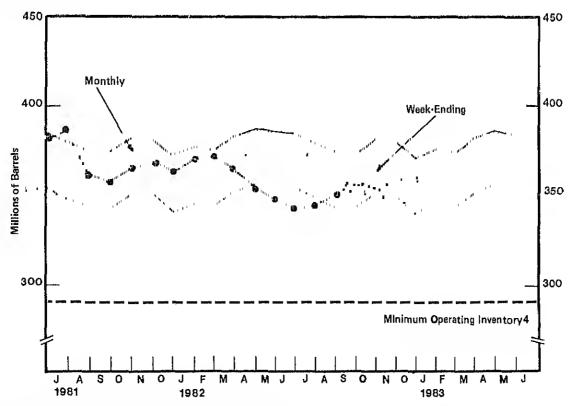
It is took include those stocks held at refineries, in pipelines, lease tenks, and in transit to refineries, and do not include those beld in the Strategic Patrolaum Reserve, assured to its stock level shown here is from the 1980 "Petrolaum Statement, Annual" and is not the same as the 1981—beals crude oil stock level used in the tions for the U.S. Petrolaum Balance Sheet (see footnote 3, page 1) assoline stocks are the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components, shown in the "Petrolaum Supply Annual" and the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components, shown in the "Petrolaum Supply Annual" and the sum of stocks of linished motor gasoline and stocks of motor gasoline blending components, shown in the "Petrolaum Supply Annual" and the sum of stocks of linished motor gasoline stocks attained as comparable to the 1981 and 1982 monthly statistics of totals of alter oils, which include aviation gasoline, atheria, petrochamical leadstocks, special nephthes, tube oil, wex, coke, espheit, road oil, and miscalianeous estimated using monthly date.

I 1980, EIA, "Petrolaum Supply Annual,"

I 1981—Current Week: Estimates based on EIA weekly dete.



Stocks of Crude Oil, U.S. Total (Millions of Barrels)



<sup>1</sup> Excludes stocks held in the Strategic Petrolaum Reserve and includes crude oil in transit to refineries.

<sup>2</sup> Averege level, width of average range, and observed minimum are based on three years of monthly data July 1978—June 1982. The seasonal pattern is based on seven years of monthly data, January 1875—Occamber 1881. See Appendix 8 for further explanation.

3 The observed minimum for total stocks in the last three-year period, July 1878—June 1982, was 1088.4 million barrels. It occurred in May 1982. See Appendix 6 for further explanation.

<sup>4</sup> The National Petrolaum Council dafines the Minimum Operating inventory as the minimum level required for routine operation. In their 1879 study, they defined this inventory level for crude oil 4 The vectorial retrolaum council darines the Milliant Operating Inventory as the Infilmation Test Indian Council darines to be 290 million barrels. See Appendix 8 for further explanation.

Source: 

Ranges and Sessonel Petterns: 1975—1980, EIA, "Petrolaum Statement, Annual (Final Summary)," 1881, EIA, "Patrolaum Supply Annual,"

Monthly data. 1981, EIA, "Petrolaum Supply Annual," January—August 1982, EIA, "Petrolaum Supply Monthly,"

Septembar 3, 1982—Current Waek. Estimates based on EIA weakly data

## Stocks of Motor Gasoline by District 1 (Millions of Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980										**		
East Coast (PAD 1)	70 2	75.0	73.7	74.8	75.2	76.4	72.9	72.8	75.7	69.9	69.2	71.1
Midwest (PAD 2)	83.1	85.0	89.0	83.3	76.9	79.1	78.9	76. <b>6</b>	77.5	70.9	72.8	76.9
Gulf Coast (PAD 3)	69.8	73.7	80.9	75.7	74.3	73.2	73 <b>2</b>	71.4	68.3	69.8	75.8	73.8
Rocky Mountain (PAD 4)	8.8	9.3	97	94	8.9	84	6.6	6.5	6.2	6.6	78	8.6
West Coast (PAD 5)	30 3	31.4	29.4	28.6	27.8	27 9	29.1	30.2	30.5	29 2	31.6	31.0
Total U.S. <sup>2</sup>	262 1	274.4	282.7	271.8	263.1	264.8	260.7	259.0	258.1	246.4	257.2	261.3
1981												
East Coast (PAD 1)	71.7	74.2	79 5	77.9	73.1	69.5	62.7	64.3	69.6	69.6	69.7	69.5
Midwest (PAD 2)	860	90.4	89.7	84.2	80.1	72.4	65.9	66 7	65.3	66.0	69.2	72.6
Gulf Coast (PAD 3)	77.2	79.6	78.5	76.2	72.2	65.9	64.0	68.6	68.5	6 <b>5</b> .0	70.6	69.5
Rocky Mountain (PAD 4)	9.7	10.3	10.2	9.4	8.6	7.4	6.5	6.0	5.8	6.3	7.7	8.5
West Coast (PAD 5)	31.5	29.5	26.9	24.4	24.3	26.3	28.6	27.8	27.9	29.2	31.2	32.9
Total U.S. <sup>2</sup>	276.1	284.0	285.0	272.1	258.3	241.6	227.7	233.3	237.1	236.1	248.4	253.0
1982												
East Coast (PAD 1)	71.7	69.6	67.1	61.7	63.6	66.0	63.1	62.4				
Midwest (PAD 2)	78.6	79.1	74.8	63.2	56.6	56.6	62.6	65.8				
Gulf Coast (PAD 3)	70.2	69.2	66.0	63.4	63.6	65.0	66.0	64.4				
Rocky Mountain (PAD 4)	9.6	99	10.1	8.9	7.7	6.5	5.8	5.5				
West Coast (PAD 5)	32.0	34.3	27.6	25.5	23.3	25.7	28.4	27.7				
Total U.S. <sup>2</sup>	262.1	262.1	247.9	222.6	214.9	219.7	226.0	226.0				
104 4 27 11												
Week Ending: 1962	9/3	9/10	9/17	9/24	10/1	10/6	10/15	10/22	10/29	11/5	11/12	11/19
East Coast (PAD 1)	62.7	62.6	62.9	62.4	63.1	62.1	62.0	62.6	62.6	62.8	R83.6	62.7
Midwest (PAD 2)	67.1	67.6	68.1	69.5	70.0	70.7	70.7	70.3	68.3	67.0	65.5	65.4
Gulf Coast (PAD 3)	62.1	63.2	63.2	66.1	66.0	66.9	64.5	64.1	65.7	66.1	R66.1	64.6
Rocky Mountain (PAD 4)	5.0	5.2	5.5	5.1	5.5	5.7	5.8	5.8	5.9	6.0	6.2	6.4
West Coast (PAD 5)	28.6	26.4	25.9	25.6	25.9	25.6	26 0	25.7	26.2	25.6	25.9	26.1
Total U.S. <sup>2</sup>	223.6	225.1	225.5	228.6	230.6	231.2	229.0	228.5	228.7	227.6	R227.2	225.2

R=EIA revision.

1 Districts are Petroleum Administration for Delense (PAD) Districts

2 PAD district date may not edd to cotal due to Independent rounding

Source:

1 980 Totals EIA, "Petroleum Statement, Annual (Final Summery)."

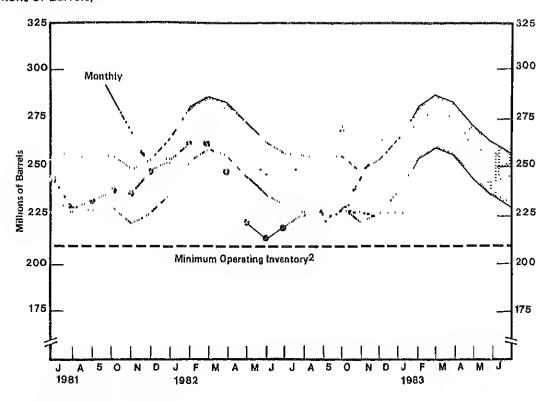
1 980 Regional Oata Unpublished date based on "Petroleum Statement, Annual (Final Summery)."

1 981 EIA, "Petroleum Supply Annual."

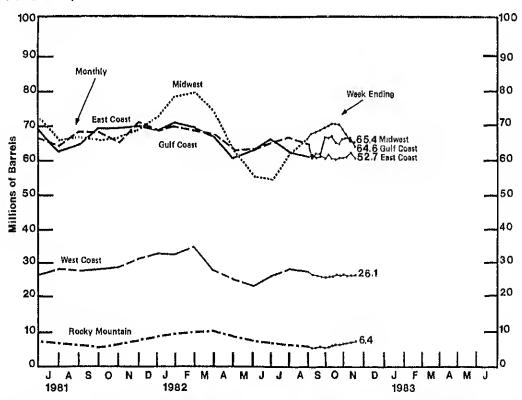
1 January—August 1882 EIA, "Petroleum Supply Monthly."

2 September 3, 1982—Current Week: Estimates based on EIA weekly data.

Note. Mator gasoline stocks are the sum of finished motor gasoline and stocks of mator gasoline blending components



Stocks of Motor Gasoline by District (Millions of Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly data:

January 1975—December 1975 and January 1978—December 1981. See Appendix B for further explanation.

2 The National Patrolaum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. In their 1979 study, they defined this inventory level for motor pasoline to be 210 million barries. See Appendix B for further explanation.

Source:

• Renges and Seasonal Patterns 1975—1980, EIA, "Patroleum Statement, Annual (Fins) Summary)," 1981, EIA, "Petroleum Supply Annual."

• Monthly Deta: 1981, EIA, "Patroleum Supply Annual, January—August 1982, EIA, "Patroleum Supply Monthly."

• September 3, 1982—Currant Week; Estimates based on EIA weekly data.

Note: Motor gesoline stocks are the sum of stocks of finished motor gesoline and stocks of motor gesoline biending components,

## Stocks of Distillate Fuel Oil by District<sup>1</sup> (Millions of Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sap	Oct	Nov	Dec
1980												
East Coast (PAD 1)	92.1	77.9	67.1	71.4	78.0	85.8	96,0	104.1	108.2	106.5	103.3	90.3
Midwest (PAD 2) Gulf Coast (PAD 3)	65.5 38.7	61.1 36.1	57.3 36.8	55. <b>7</b> 33.5	54.3 34.7	56.8 38.4	60.2 41.2	62.4 42.9	62.6 45.5	57.4 46.1	58.2 44.2	58.5 39.8
Rocky Mountain (PAD 4)	3,5	3,7	3,9	3.9	34.7	3.5	3.9	3,9	3,6	3,3	3,3	3,4
West Coast (PAD 5)	12.6	12.8	12.8	12.8	12,6	12.1	12,6	13.0	12.4	12.3	13.4	13.1
Total U.S. <sup>2</sup>	212,4	191,6	177.8	177.2	183.4	196.5	213.8	226.3	232,4	225.7	222.4	205.1
1981												
East Coast (PAD 1)	71.9	69.8	64.7	64.4	68.2	73.8	81.3	86,3	92.0	94.8	96.0	07.4
Midwest (PAD 2)	57.7	56.1	52.5	52 4	50,5	48.7	49.8	54,1	54.3	51.0	<b>51.6</b>	50.0
Gulf Coast (PAD 3)	34.0	32,3	32,4	34,7	39.2	42.9	40.7	44,5	44.8	39.8	36.7	35,5
Rocky Mountain (PAD 4)	3.4	3.3	33	2.9	3.2	3.4	3.7	3.8	3.6	3.3	3.6	3,9 14.7
Wast Coast (PAD 5)	12.4	11,1	11.4	10.3	10.7	11.1	10.8	11.4	12.5	12,3	12,3	14.7
Total U.S. <sup>2</sup>	179.4	172.5	164.3	164.6	171.8	178.9	186,3	200.2	207.3	201.2	200.1	191,5
1982												
East Coast (PAD 1)	69.2	68.4	44.9	35.1	39,2	44.2	57.4	63,9				
Midwast (PAD 2)	47.4	43.8	40.2	31.2	31,2	34.1	42.6	45,5				
Gulf Coast (PAD 3)	30.8	26.7	27,5	28.2	31,0	32,5	34.2	35,8				
Rocky Mountain (PAD 4)	4.1	3.9	3.7	3.1	2,8	3.0	3,4	3,5				
Wast Coast (PAD 5)	14.5	13.9	11.4	11.1	10.3	10.7	10.6	10,2				
Total U.S. <sup>2</sup>	166.0	146.7	127.7	108.8	114,5	124,5	148.1	158,9				
Week Ending:												
1982	8/3	9/10	9/17	9/24	10/1	10/8	10/16	10/22	10/29	11/5	11/12	11/19
East Coast (PAD 1)	81.8	63.6	62.9	64.8	63.7	67.0	68.6	69.6	71.7	76.8	R77.6	81.5
Midwast (PAD 2)	46.3	46.6	46.6	46.2	44.6	46.1	46.4	46.3	45.6	45.1	44.8	44.6
Gulf Coast (PAD 3)	35.3	35.4	36,3	35.0	33,4	33,4	34.1	34.8	34.5	35.0	R38.8	36.8
Rocky Mountain (PAD 4)	3.4	3.5	3.4	3.4	3.4	3.3	3.4	3.3	3.2	3.4	R3.3	3.0
West Coast (PAD 5)	9.4	10.2	9.8	9.3	8.3	9.4	8.1	8.8	8.7	8.5	9.1	9.6
Total U.S. <sup>2</sup>	156.2	169.2	158.0	158.7	154.5	158.2	161.6	162.8	163.6	167.8	R171.5	176.3

R=EIA revision.

1 Districts are Potroleum Administration for Defense (PAD) Districts

2 PAO district date may not add to total due to independent rounding

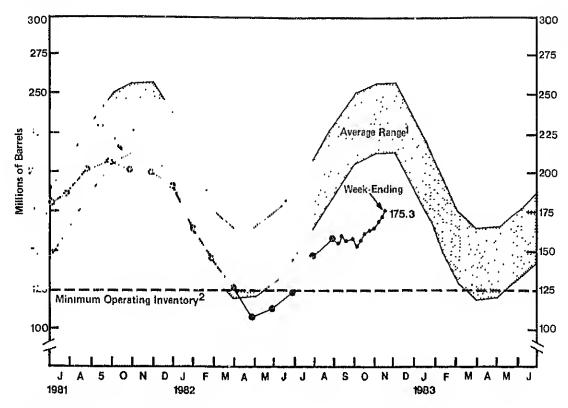
Source: • 1980 Totals EIA, "Petroleum Statement, Annual (Final Summary)"

• 1980 Regional Oata Unpublished data based on "Petroleum Statement, Annual (Final Summary)."

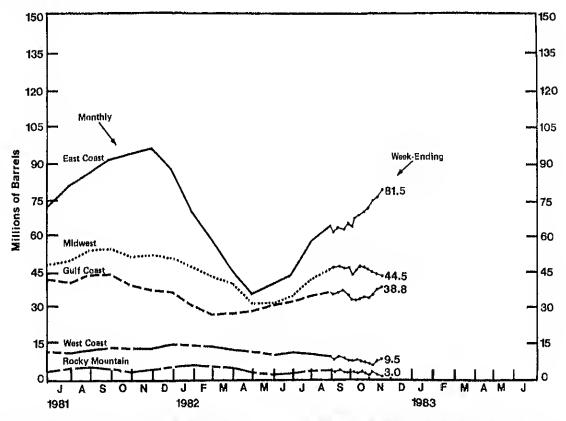
• 1981: EIA, "Petroleum Supply Annual"

• January-August 1982 EIA, "Patroleum Supply Monthly."

• September 3, 1982—Current Week Estimates based on EIA weekly data



Stocks of Distillate Fuel Oil by District (Millions of Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly data: July 1979—June 1982. The seasonal pattern is based on seven years of monthly data: January 1975—December 1981. See Appendix B for further explanation.

2 The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. In their 1979 study, they defined this inventory level for distillata fuel oil to be 126 million berrels. See Appendix B for further explanations.

Source: e Ranges and Seesonal Patterns 1976—1980, EIA, "Petroleum Statement Summary)," 1981, EIA, "Petroleum Supply Annual,"

e Monthly Oata: 1981, EIA, "Petroleum Supply Annual, January—August 1982, EIA, "Petroleum Supply Monthly."

e September 3, 1982—Currant Week: Estimates based on EIA weekly date.

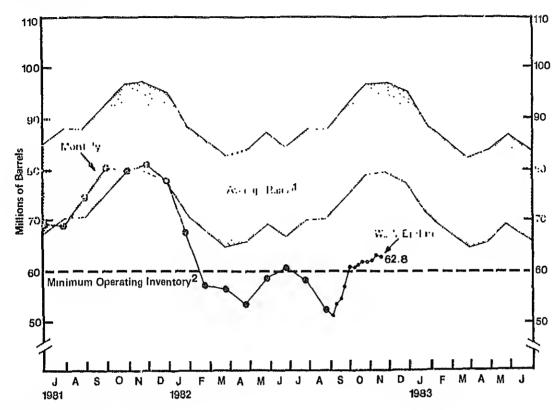
# Stocks of Residual Fuel Oil by District<sup>1</sup> (Millions of Barrels)

Year/District	Jan	Fnb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980								· · · · · · · · · · · · · · · · · · ·				
East Coest (PAD 1)	49.0	42.6	43.0	43.8	43.4	45.1	44.0	43.6	43.8	45.9	46.5	45.4
Midwest (PAD 2)	12,7	12.5	12.0	10.7	10.8	10.9	9.8	9.3	8.9	9.0	8.6	9.1
Gulf Coast (PAD 3)	22.1	22.7	19.5	17.3	20.1	18.9	19.4	21.0	22.3	23.0	25.2	23.8
Rocky Mountain (PAD 4)	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.8
West Coast (PAD 5)	12.4	12.1	12.8	12.5	12.6	12.0	11.6	12.0	12.0	12.3	12.1	12.6
Total U.S. <sup>2</sup>	97.2	91.0	88.3	85.3	87.7	87.8	85.6	86.9	87.9	91.0	93.2	91.8
1981												
Eest Coast (PAD 1)	39.0	38.5	37,3	36.3	38.2	33.6	33.0	34.4	40.0	40.4	43.0	40.1
Midwest (PAD 2)	9.2	9.0	7.9	7.3	7.1	7.0	7.7	8.1	8.5	8.0	8.2	8.3
Gulf Coast (PAD 3)	21.8	19.7	19.4	19.1	21.7	17.0	17.4	21.2	20.4	20.4	19.7	18.7
Rocky Mountain (PAD 4)	0.8	0.7	0.6	0.5	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.7
West Coast (PAD 5)	11.4	10.1	9,7	9.7	10.5	11.2	10.7	10.7	10.7	10.4	9.8	10.2
Total U.S. <sup>2</sup>	82.1	77.9	74.8	72.9	78.1	69.4	69.3	74.9	80.2	79.9	81.4	78.0
1982												
East Coast (PAD 1)	32.2	24.9	24.8	23.5	28.3	28.2	27.1	23.1				
Midwest (PAD 2)	7.7	7.3	7,0	6.2	6.0	6.7	6.7	5.3				
Gulf Coast (PAD 3)	17.4	14.4	14.7	13.5	14.9	17.1	16.4	15.6				
Rocky Mountain (PAD 4)	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.4				
West Coast (PAD 5)	10.2	11.0	10.3	9.9	9.4	9.2	9.3	8.4				
Total U.S. <sup>2</sup>	68.2	58.1	57.3	53.6	59.1	60.5	59.0	62.8				
Missle France												
Waek Ending: 1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/6	11/12	11/19
East Coast (PAD 1)	23.5	24.3	26.1	26.8	29.5	28,9	29.0	30.7	32.1	32.5	R33.8	34.3
Midwast (PAD 2)	6.3	5.4	6.2	6.4	5.6	5.1	6.1	4.9	4.8	4.6	4.7	4.7
Gulf Coast (PAD 3)	14.6	15.9	16.0	16.3	15.7	16.6	17.1	16.1	14.9	15.8	R18.1	16.7
Rocky Mountain (PAD 4)	0.6	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6
West Coast (PAD 5)	7.8	8.0	8.0	8.8	9.5	9.2	9.2	9.3	9.3	8.4	R7.8	7.5
Total U.S. <sup>2</sup>	51.5	54.0	65.8	57.8	60.8	60.4	60.9	61.7	61.7	61.9	62.9	62.8

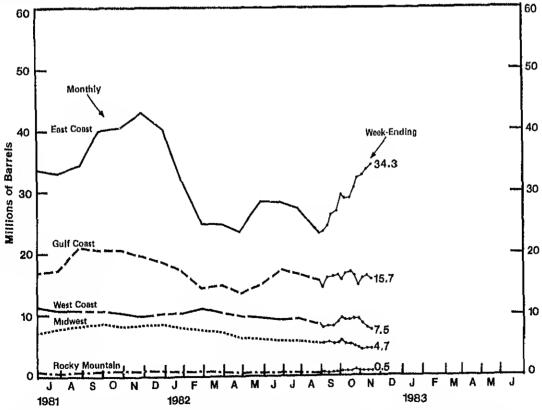
R=EIA revision.

1 Districts are Petroleum Administration for Defense (PAD) Districts
2 PAD district date may not add to total due to independent rounding
Source: • 1980 Totals EIA, "Patroleum Statement, Annual (Final Summery)"
• 1980 Regional Date Unpublished date based on "Petroleum Statement, Annual (Final Summery)"
• 1981 EIA, "Petroleum Supply Annual"
• January—August 1992 EIA, "Potroleum Supply Monthly"
• September 3, 1982—Current Week. Estimates based on EIA weekly data

## Stocks of Residual Fuel Oil, U.S. Total (Millions of Barrels)



Stocks of Residual Fuel Oil by District (Millions of Barrels)



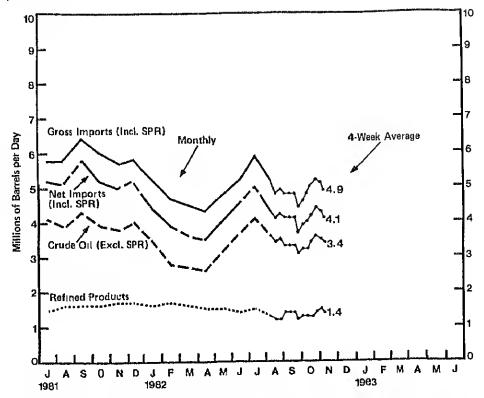
<sup>1</sup> Average level and width of average range are based on three years of menthly data: July 1979—Juna 1982. The seasonal pattern is based on seven years of monthly data: January 1975—December 1981. See Appendix 8 for further explanation.

2 The National Patrolaum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. In their 1979 study, they defined this Invantory level for residual fuel oil to be 60 million berrets. See Appendix 9 for further explanation.

Source: • Ranges and Seasonal Patterns 1875—1980, EIA, "Patrolaum Statement, Annual (Final Summary)," 1991, EIA, "Patrolaum Supply Annual."

• Monthly Data: 1981, EIA, "Patrolaum Supply Annual, January—August 1982, EIA, "Patrolaum Supply Monthly."

• Septamber 3, 1982—Current Week; Estimates based on EIA weekly data.



Year/Product	Jan	Fab	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980						-		4.0	4.7	4 =	4 =	4.0
Crude Oil (Excl. SPR)	8.4	5.0	5.7	5.6	5.1	5.5	4.8	4.8	4.7	4.5	4.5	4.0 0.2
SPR	0	0	0	0	0	0	0	0	0.1	0.1	0.1 1.7	1.8
Refined Products	2.2	1.9	1.8	1.5	1,5	1.4	1.4	1.4	1.5	1.6	6.4	6,9
Total (Gross Incl. SPR)	8.5	7.9	7.5	7.1	6.5	5.9	6.3	5,2	5.2	6.4		0.6
Total Exports	0.5	9.0	0.6	0.4	0,5	0.7	0.5	0.3 5.9	0.5 5.7	0.5 5.8	0.5 5.9	6.3
Total (Net Incl. SPR)	8.0	7.4	5.9	5.7	6,0	5.2	5.7	6,6	0.7	0.0	0.9	U,O
1981										_		
Crude Oll (Excl. SPR)	4.8	4.8	4.4	4.1	3.9	3.7	4.1	3.9	4.3	3.9	3.8	4.0
SPR	0.1	0.1	0.1	0.3	0.4	0.3	0.2	0.3	0.4	0.5	0.3	0.2
Refined Products	1.9	1.9	1.5	1,3	1.5	1.4	1.5	1.5	1.6	1.6	1.7	1.7
Total (Gross Incl. SPR)	5.8	5.8	5.0	5.7	5.8	5.4	5.8	5.8	6.4	6.0	5.7	5.8
Totel Exports <sup>1</sup>	0.5	0.5	0.6	0.5	0.5	0.4	0.6	0.5	0.5	0.7	0.7	0.7
Totel (Net Incl. SPR)	6.3	5.2	5.4	5.1	5.2	5.0	<b>5.2</b>	5.1	5.8	5.2	5.0	5.2
1982												
Crude Oil (Excl. SPR)	3.5	2.8	2.7	2.6	3.1	3.7	4.1	3.6				
SPR	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0,2				
Refined Products	1.6	1.7	1.5	1.5	1.5	1.4	1.5	1.3				
Total (Gross Incl. SPR)	5.2	4.7	4.5	4.3	4.8	5.2	5.8	5.2				
Total Exports	8.0	8.0	0.9	8.0	8.0	0.7	0.7	0.9				
Total (Net Incl. SPR)	4.4	3.9	3,6	3.5	4.0	4.5	5.0	4.3				
Averege for Four-Week Per	lod Endin	a:										
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
Crude Oil (Excl. SPR)	3.4	3.5	3.3	3.3	3.3	3.1	3.2	3.2	3.4	3.6	3.5	3.4
SPR	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1
Refined Products	1.2	1.2	1.4	1.4	1.4	1.2	1.3	1.3	1.3	1.4	1.5	1.4
Total (Gross Incl. SPR)	4.8	4.9	4.8	4.8	4.8	4.4	4.5	4.8	5.0	5 2	5.1	4.9
Total Exports	E0.8	E0.7	E0.7	E0.7	E0.7	E0.7	E0.7	E0.8	E0.8	E0.8	E0,9	E0.9
Total (Net Incl. SPR)	4.1	4.2	4.1	4,1	4.1	3.7	3.9	4.0	4.2	4.4	4.3	4,1

E=Estimetes based on most recent monthly date evallable

Includes exports of crude oil and refined petroleum products. Experts of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-lor-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

Source: a 1980. EIA, "Petroleum Stetement, Annuel (Final Summary) "

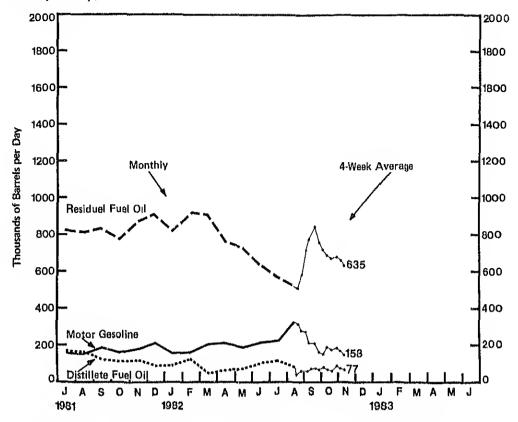
• 1981. EIA, "Petroleum Supply Annual."

• January—August 1982. EIA, "Petroleum Supply Monthly."

• September 3, 1982—Current Week. Four-week averages based on EIA weakly date.

Note. Detail date may not add to total due to Independent rounding.

## **Gross Imports of Petroleum Products by Product** (Thousands of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980												······································
Motor Gasoline <sup>1</sup>	141	154	155	155	132	148	149	141	106	152	126	121
Jat Fuel	96	43	100	110	73	86	93	67	77	86	63	60
Distillate Fuel Oil	179	237	193	154	126	108	117	77	101	115	133	166
Residual Fuel Oil	1,338	1,122	976	775	812	749	787	876	906	875	1,024	1,025
Other <sup>2</sup>	437	378	333	315	330	323	267	230	343	384	380	438
1981												
Motor Gesoline <sup>1</sup>	158	121	200	209	177	197	169	167	195	159	189	212
Jet Fuel	15	38	76	55	47	68	36	47	46	14	9	7
Distillete Fuel Oil	273	325	147	116	179	225	179	174	129	119	124	96
Residuel Fuel OII	1,015	954	699	584	741	540	830	819	841	786	880	916
Other <sup>2</sup>	434	452	385	356	345	344	309	380	389	492	492	475
1982												
Motor Gasoline <sup>1</sup>	158	165	202	208	199	218	237	334				
Jet Fuel	10	62	39	47	31	3	15	26				
Distillete Fuel Oll	95	130	48	59	74	100	124	79				
Residuel Fuel Oil	821	928	910	762	738	643	676	519				
Other <sup>2</sup>	500	465	405	397	429	482	566	378				
Averege for Four-We	ek Period I	Ending										
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
Motor Gasoline <sup>1</sup>	323	287	281	212	211	169	169	104	184	100	170	160
Jet Fuel	43	42	31	37	28	20	28	194	23	192	178	168
Distillete Fuel Oil	45	69	53	73	75	67	79	26 7 <b>1</b>	23 62	26 84	17	22
Residual Fuel Oil	517	689	727	782	848	758	716	696	571	679	78 P660	77 620
Other <sup>2</sup>	285	268	272	260	196	218	273	324	400		R660	636
- e w ;	200	200	212	200	100	410	2/3	944	400	462	R636	540

R=EIA revision,

1 includes imports of finished motor gasoline and imports of motor gasoline blending components.

2 includes imports of kerosene, unfinished alls, and other alls.

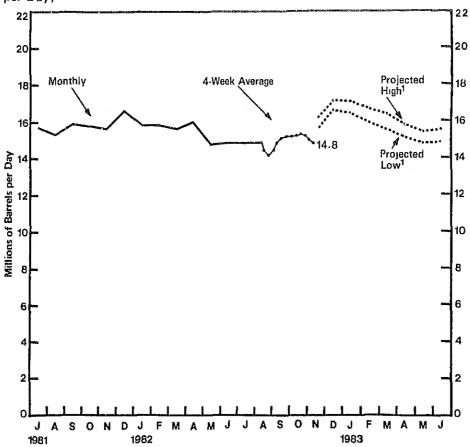
Source: • 1980: EIA, "Petroleum Statement, Annuel (Final Summary)"

• 1981: EIA, "Petroleum Supply Annual."

• January—August 1982: EIA, "Petroleum Supoly Monthly"

• September 3, 1882—Current Week. Four-Week averages based on EIA weekly data,

Total Petroleum Products Supplied for Domestic Use (Millions of Barrels per Day)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	18.9	18.8	17.4	16.8	16.2	16.2	16.0	15.8	16.6	17.0	16.7	18.4
1981	18.4	17.0	15.9	15.4	15.4	16.1	15.7	15.3	15.9	15.8	15.6	16.6
1 <b>9</b> 8 <b>2</b>	15.9	15.9	15.6	16.0	14.8	14.9	14.8	14.8				
Average for Fou 198 <b>2</b>	ı <b>r-Week</b> Peri <b>9</b> /3	od Endin 9/10	g: 9/17	9/ <b>2</b> 4	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
<del></del>	14.4	14.2	14.5	14.8	15.1	15.2	15.2	15.2	15.3	15.2	15.0	14.8

1 Projected. See Appendix C for explanation of derivation of values.

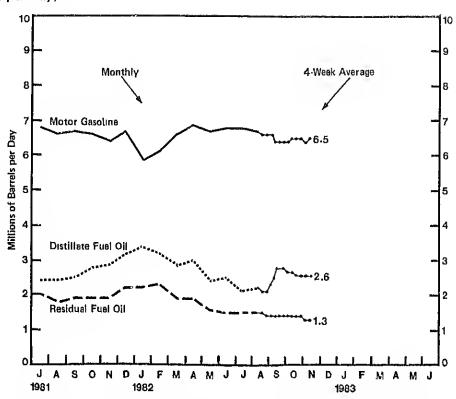
Source. • 1990 EIA, "Petroleum Statement, Annuel (Final Summary) "

• 1991 EIA, "Petroleum Supply Annual,"

• January—August 1982: EIA, "Petroleum Supply Monthly,"

• Septamber 3, 1982—Current Week Four-week averages based on EIA weekly data

• Projections. EIA, Office of Energy Markets and End Use (August 1982).



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980			<u></u>					_				
Motor Gasoline	6.3	6.6	6.4	8,8	8.7	6.7	6.7	8.6	6.6	6.7	6.2	6.8
Jet Fuel	1.1	1.1	1.1	1.1	1.0	1.1	1,1	1,0	1.1	1.0	1,0	1.1
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0,1	0.1	0.1	0,1	0.2
Distillate Fuel Oll	3.7	3.7	3,2	2.8	2.4	2.3	2.2	2,1	2.6	2.9	2.9	3.8
Residuel Fuel Oil	3,1	3,1	2.7	2.4	2.2	2.3	2.3	2.3	2.4	2.2	2.6	2.7
Other	4.4	4,1	3.8	3.7	3.8	3.7	3.5	3,6	4.0	4.0	3.9	4.2
1981												
Motor Gesoline <sup>1</sup>	6.4	6.3	6.3	6.6	6.6	7.0	6.8	6.6	6.7	6.6	6.4	6.7
Jet Fuel	1.1	1.0	1.1	1.0	0.9	1,0	1.1	1.0	1.0	0,9	1.0	1.0
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel Oil	4,1	3.4	2.9	2.6	2.4	2.4	2.4	2.4	2.6	2.8	2.9	3.2
Residuel Fuel Oil <sup>1</sup>	2.9	2.5	2.1	1.9	1.8	2.0	2.0	1.8	1.9	1,9	1.9	2.2
Other	3.7	3,5	3.4	3.3	3.5	3.4	3.3	3.3	3.5	3.6	3.3	3.3
1982												
Motor Gasoline <sup>1</sup>	5.9	6.1	6.6	6.9	6.7	6.8	6.8	6.7				
Jet Fuel	1.0	1.1	1.0	1.0	1.0	1,0	1.0	1.0				
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1				
Distillate Fuel Oil	3.4	3.2	2,9	3.0	2.4	2,5	2,1	2.2				
Residual Fuel Oil <sup>1</sup>	2.2	2.3	1.9	1.9	1.6	1,5	1.5	1.6				
Other	3.2	3.2	3.1	3.2	3.1	3.1	3.3	3.4				
Averege for Four-Wee	k Period	Ending:										
1982	9/3	9/1Ŏ	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19
Motor Gesoline <sup>1</sup>	8.6	6.6	8.6	6.4	6.4	6.4	6.4	6.6	6.6	6.6	8.4	6.6
Jet Fuel	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.1
Kerosene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Distillete Fuel Oil	2.1	2.1	2.3	2.5	2,8	2.8	2.7	2.7	2.6	2.6	R2.6	2.6
Residuel Fuel Oll	1.6	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
Other	3.1	2.9	3.0	3.3	3.3	3.5	3.6	3.5	3.5	3.6	3.4	3.2

R=EIA revision.

1 Products supplied statistics for 1981 and 1982 should not be compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residuel fuel oil. See Appendix D for further explanation.

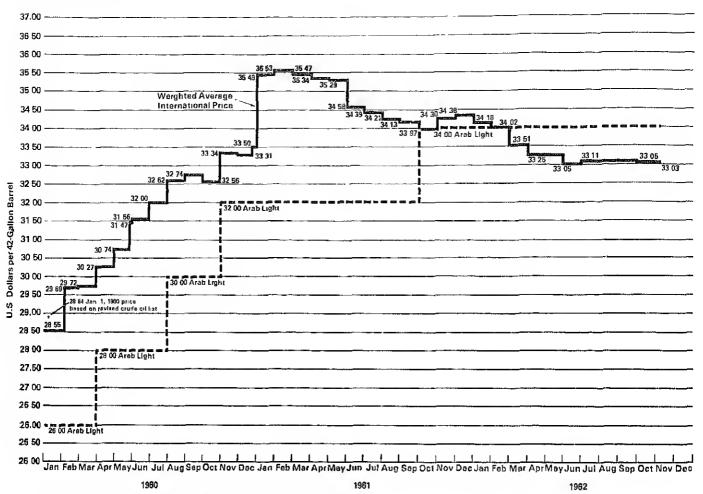
Source: • 1980, EIA, "Petroleum Statement, Annuel (Finel Summary)."

• 1881: EIA, "Petroleum Supply Annual."

• January--August 1982. EIA, "Petroleum Supply Monthly."

• September 3, 1982—Current Week: Four-week everages based on EIA weekly data.

## World Crude Oil Prices<sup>1</sup> (Dollars per Barrel)



v Internationally traded oil only. Avarage price (FOB) weighted by estimated export volume

Note Beginning with the May 1, 1931 issue of the Weakty Patroleum Status
Report, the world crude oil price is based on a revised crude list
Additions Saudi Arabis's Arabian Heavy, Dube's Fatah, Egypt's Suez Bland, and Moxico's Maya
Omissions, Canadian Heavy
Replacements Iraq's Kirkuk Bland for Iraq's Basrah Light
The ebave graph shows an estimated world crude oil price based on this revised list
baginning January 1, 1931. An asterisk shows the January 1, 1930 price based on the revised
list All other 1930 prices represent the old crude list bafore revisions.

	Type of							t Change rice From
	Crude/ APi	Current	In Effect	In Effect	In Effect	in Effect	In Effect	în Effect
Country	Gravity	Price	1 Jan 82	1 Jan 81	1 Jan 80	31 Dec 78	1 Jan 80	31 Dag 78
DPEC	······································				· · · · · · · · · · · · · · · · · · ·			
Saudi Arabia	Arebian Light 34 <sup>0</sup> (Bench mark cruda)	34 00	34 00	32 00	26,00	12.70	30 8	167.7
	Saudi Berri 390	34 52	35 40	33 52	27 52	13 23	25 4	160 9
	Arabian Heavy 280	31 00	31 00	31 00	25 00	12 02	24 0	167.9
Abu Dhabi	Murban 39 <sup>0</sup>	34 56	36 50	35,55	29.58	13 28	15 9	160.6
Dubal	Fateh 32°	33 86	33 85	35,93	27 93	12 54	21.2	167.9
Qatar	Dukhan 40°	34.49	35 45	37 42	29.42	13.19	17.2	161,5
Iren	Iranian Light 34°	31.20	34.20	37 00	29.42 230 00	13.46	4.0	132.0
Iraq	Kirkuk 36 <sup>0</sup>	34 83	34.83	37 50	29.29	13.17	189	164.5
Kuwait	Kuwait Bland 31 <sup>o</sup>	32 30	32.30	35 60	27.50	12.22	17.6	164,3
Neutral Zone	Khetii 280	31 03	31.03	35.20	27.20	12.22	141	167,9
	Sahaian 44 <sup>0</sup>	35 50	37.00	40 00	3300	14 10	7.6	161 B
Algeria	Sanaian 44				29 97		186	134.8
Nigeria	Bonny Light 37°	36.60	38,50	40 00		15.12		154.6 156.5
Libya	Es Sider 37º	35 10	36 60	40.78	34.50	13.68	1 7 25,6	
Indonesie	Mines 340	34.53	35,00	35.00	27 50	13.66		154.8 158.5
Venezuela	Tia Juana 25°	32.80	32.88	32.88	25,20	12 72	30 5	
Gabon	Mandji 28.6°	34.00	34.00	35.00	28,00	12 69	21.4	170.1
Ecuador	Driente 30°	32 60	34.25	40 06	33.60	12.35	-3.0	163.2
Total DPEC <sup>3</sup>	NA	33.54	34.13	34 82	28 30	13.03	18 6	167.4
Non DPEC								
United Kingdom	Fortles 36.50	33.50	38.60	30.25	28.76	14,00	12.B	138.3
Norway	Ekofisk 42°	34.26	37.26	40 00	32.50	14 20	Б.4	141.2
Mexico	Maylean Light 32 <sup>v</sup>	32.50	35.00	30.50	32.00	13.10	1.8	148 1
"	Mexican Heavy 220	25.00	26.50	34,60	28,00	NA	-10.7	NA
Egypt	Suez Blood 33 <sup>0</sup>	432.60	34,00	40.50	34.00	12 81	-4.1	154.5
Oman	Oman 38 <sup>0</sup>	34.00	35.00	37.50	30.28	13.08	12.4	160.3
Syria	Suwadiyah 260	30.00	30.00	38 03	31.39	11.64	-4.4	167.7
Malaysia	Suwadiyah 26° Miri 38°	35.60	38.60	41.30	33.60	14.30	8.0	148.0
Crunol	Seria 38.6°	36.10	36.10	40 36	33.40	14.16	6.1	148.1
Brunel U.S.S.R. <sup>5</sup>	Export Bland 33 <sup>0</sup>	31.20	35.48	39.26	33.20	13.20	-6.0	138.4
Total Non OPEC <sup>3</sup>	NA	31.84	34.35	38,64	31.84	13.44	-0.3	136.9
Total World 3	NA	33.03	34.18	35.48	28.84	13.08	14 6	152.5
United States <sup>6</sup>	NA	32.61	34.16	38.68	28.36	13.38	10.8	143,0

NA=Not Applicable.

I Official sales prices or estimated term contract prices; spot prices excluded, 2 37c higher at 60 days' credit.

3 Average prices (FOB) weighted by estimated export volume.

4 On 60 days' credit.

5 Average delivered cost to Northwest Europe.

8 Average prices (FOB) weighted by estimated import volume.

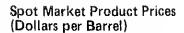
Source: « DOE, Office of international Alfeits, November 24, 1982.

• Platt's Oligram Price Report.

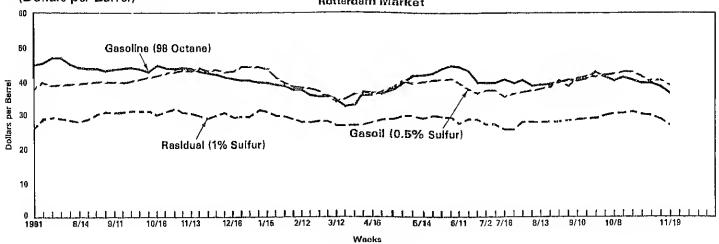
• Potroleum Intelligence Weekly.

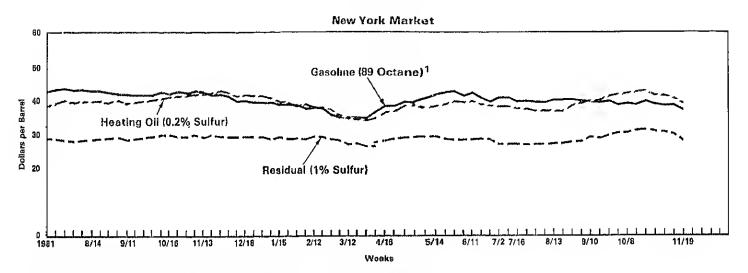
• Oil Buyers' Guide.

• Europe Oil Prices.



### Rotterdam Market



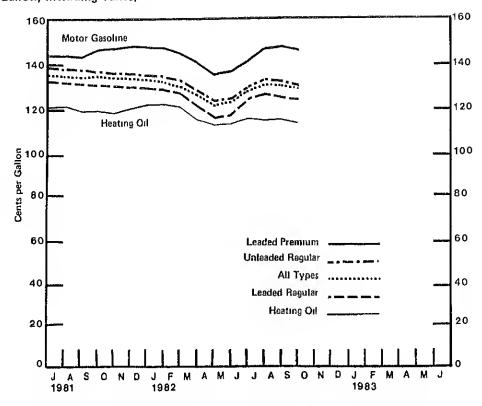


The prices shown through September 25, 1981 are for 94 actane gesoline rather than for 89 octane gesoline. Source: 
 Oil Suyers' Guide, Weekly Oil Market Product Report.
 DOE, Office of International Affairs.

		Motor C	Basoline	Gasoil/H	eating Oil <sup>1</sup>	Residua	al Fuel Oil <sup>2</sup>
	_	Rotterdam (98 Octane)	N.Y. <sup>3</sup> (89 Octane)	Rotterdam (0.5% Sulfur)	N.Y. <sup>4</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	N.Y. <sup>3</sup> (1% Sulfur
981 Nov	6	44.20	42.71	4 <b>3</b> .23	41.69	3 <b>0</b> .48	29.75
	13	43.32	42.15	4 <b>3</b> .16	41.90	30.33	29.90
	20	42.79	41.54	43.70	41.90	29.65	29.90
	27	42.73	41.54	43.10	42.59	28.83	29.10
Dec	4	42.15	41.03	43.57	42.10	29.88	29,90
	11	41.03	39.61	42.83	41.16	3 <b>0</b> ,41	29.00
	18	41.03	39.82	43.16	41.48	29.20	29.00
	24	40.50	39.50	44.57	41.48	29.50	29.00
982 Jan	8	39.98	39.67	44.30	40.42	31.68	28.40
	15	38.68	38.72	43,57	39.90	3 <b>0</b> .78	29.00
	22	38.57	38.93	<b>40</b> .88	39.38	<b>29</b> .50	28.35
	29	38.22	38.30	39.21	38.22	<b>29</b> .73	28.70
Feb	5	37.22	37.67	38.40	38.54	2 <b>8</b> .68	28.50
	12	37.22	37.61	37.87	37.90	27.93	29.25
	19	35.93	37.61	<b>3</b> 7.87	37.80	27.93	29.25
	26	35.52	35.72	37.00	37.38	28.08	28.50
Mar	5	35.46	34.88	35.32	35.28	28.08	28.00
	12	34.41	34.57	34.38	33.60	26.95	27.00
	19	32.42	34.55	34.99	34.02	26.50	27.00
	26	32.83	34.52	36.13	34.06	26.65	26.25
Apr	2	36.64	36.54	35.52	34.54	<b>26</b> .80	26,25
	9	36.17	38.01	35.72	36.12	27.78	27.70
	16	36.64	38.22	36.66	38.64	<b>28</b> .53	28.50
	23	37.51	39.69	37.87	38.22	28.75	28.75
	30	39.57	39.40	<b>39.</b> 68	38.32	29.43	29.0 <b>0</b>
May	7	41.68	40.53	<b>3</b> 8.81	37.80	29.80	29.25
	12	41.85	41.87	3 <b>9</b> .21	38.32	29.73	29,6 <b>0</b>
	19	42.67	42.29	40.21	38.85	29.73	28.75
	26	43.79	42.61	4 <b>0</b> .35	39.69	29.43	2 <b>8.</b> 35
Jun	4	44.37	41.68	<b>40</b> .55	39.48	<b>2</b> 9.05	28.35
	11	44.08	42.21	<b>3</b> 9.34	39.90	27.40	<b>28.40</b>
	18	43.08	40.66	37.60	38.64	28.60	28.5 <b>0</b>
	25	39.57	39.56	36.5 <b>3</b>	38.33	28.45	28.25
Jul	2	39.86	40.07	<b>37.27</b>	38.01	27.10	27.0 <b>0</b>
	9	39.86	40.07	37.27	38.01	27.10	27.0 <b>0</b>
	16	40.04	39.73	<b>3</b> 5.32	37.59	25.90	27.0 <b>0</b>
	23	39.57	39.84	36.13	37.38	25.53	26.8 <b>0</b>
	30	40.12	39.69	36.98	36.96	27.78	27.0 <b>0</b>
Aug	6	38.80	39.69	<b>3</b> 7.33	37.06	28.00	27.0 <b>0</b>
	13	38.45	40.00	37.60	37.80	27.85	27.0 <b>0</b>
	20	39.15	40.00	<b>38.7</b> 0	37.80	27.86	27.26
•	27	39.86	40.05	40.28	38.32	27.85	27.75
Sep	3	40.56	39.84	38.46	39.48	28.38	28.0 <b>0</b>
	10	40.39	39.69	41.02	39.58	28.68	29.26
	17	41.03	39.38	41.22	39.90	28.75	28,76
	24	42.61	39.38	41.22	41,26	28.90	29,60
Oct	1	41.03	38.54	41.96	41,58	29.88	30.25
	8	40.15	38.96	<b>42.29</b>	42.00	30.33	30.36
	15	41,03	38.74	42.96	42.42	30.48	31.00
	22	40.04	39.69	42.76	42.74	30.78	31.36
	29	39.39	38.96	41.42	41.37	30.26	30.75
Nov	5	39.80	38.45	3 <b>9</b> .88	41,37	29.95	30.50
	12	38.22	38.56	40.28	40.32	28.75	30.00
	19	36.11	37.02	38.81	38.85	26.88	28.0 <b>0</b>

<sup>1</sup> Refers to No. 2 Heating Oil
2 Refers to No. 6 Oil.
3 East Coest Cargoes.
4 New York Harbor Reseller Barge Prices
Source. e Oil Buyers: Guide, Weekly Oil Merket Product Report.

e DOE, Office oil internetional Affeirs



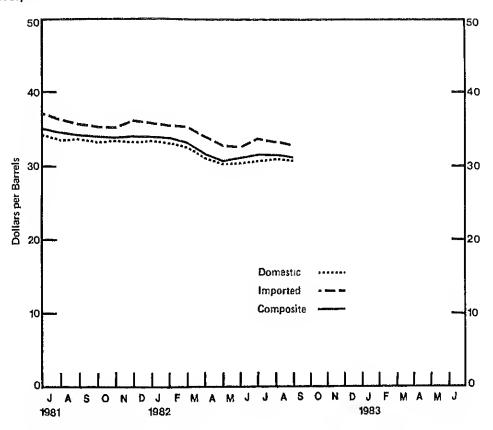
Year/Product	Jan	Feb	Mer	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980												
Motor Gasoline												
Leaded Premium	114.9	123,2	127.7	129.2	129.5	130.0	130.7	131.0	130.4	130.1	129,9	131.0
Leaded Reguler	108.6	115.9	120.2	121.2	121.5	121.7	121.6	121.0	119.7	118.8	118.8	119.7
Unleaded Reguler	113.1	120.7	125.2	126.4	126,6	126,9	127.1	126.7	126.7	126.0	126.0	125.8
All-types	111,0	118.6	123.0	124.2	124.4	124.6	124.7	124.3	123,1	122,3	122.2	123.1
Residential Heating Oil	8,08	95.3	97.1	97.4	97.2	97.9	97.9	97.9	98.1	98.7	101.0	108.5
1981												
Motor Gasoline												
Leaded Premium	133.8	141.0	144.9	145.1	144.7	144.6	144.6	144.4	146.6	145.7	146.2	146.0
Leaded Regular	123.8	132.1	135.2	134.4	133.3	132.4	131.6	131.0	130.5	129.8	129.7	129.3
Unleaded Regular	129.8	138.2	141.7	141.2	140.0	139.1	138.2	137.6	137.6	137.1	136.9	136.5
Ail-types	126.9	135.3	138.8	138.1	137.0	136.2	135.3	134.8	135.8	135.3	136.1	134.8
Residential Heating Oil	114.4	123.4	126.5	123.9	122.7	120,9	121.0	119.4	119.7	118.8	120.8	122.0
1982												
Motor Gasoline												
Leeded Premium	145.6	143.8	140.7	136.8	137.9	140.8	145.0	145.8	144.1			
Leaded Regular	128.5	126.0	120.6	114.8	116.6	124.2	126.3	125.4	123.6			
Unteaded Reguler	135.8	133.4	128.4	122.5	123.7	130.9	133.1	132.3	130.8			
All-types	134.1	131.8	126.8	121.0	122.4	129.6	131.8	131.0	129.6			
Residential Heating OII	122.0	120.7	115.3	113.2	114.3	116.2	116.8		P114.8			

Note Motor gasoline data Include prices from self service stations. Beginning with September 1931, the Bureau of Labor Statistics has changed the weights used in the celculation of average motor gasoline prices. In the "cill types" category gasoline is now included, and unleaded premium is weighted more heavily.

Source: • Motor Gesoline—Bureau of Labor Statistics. See delimitions for description of servey.

• Residential Healing Oil—Through October 1980. Form EIA—9, "No. 2 Healing Oil Supply/Price Monitoring Report."

November 1980 Forward: Form EIA—9A, "No. 2 Distillete Price Monitoring Report."



Year/Type	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
 1980												
Domestic	19.78	21.22	22.07	22.89	23.63	24.48	25.05	24.98	25.37	28.21	28.51	28.55
Imported	30.75	32.40	33.42	33.54	34.33	34.48	34.51	34.44	34.45	34.53	35.09	36.63
Composite	24.81	25.11	25.88	27.09	27.85	28.80	28.73	28.70	28.96	29.56	29.79	31.39
1981												
Domestic	32.71	35.27	35.97	35.58	35.21	34.20	33.75	33.79	33,47	33.48	33.49	33,61
Imported	38.85	39.00	38.31	38.41	37.84	37.03	36.58	35.82	35,44	35.43	36,21	35,96
Composite	34.86	37.28	37.48	35.58	35.11	35.03	34.70	34.46	34.11	34.07	34.33	34.33
1982												
Domestic	33,39	32.71	31.08	30.27	30.37	30.79	30.92	30.85				
Imported	35.54	35.48	34.07	32.82	32.78	33.79	33,44	32.95				
Composite	33.95	33.40	31.81	30.83	31.02	31.74	31.74	31.45				

<sup>\*</sup> Source: e 1980\* ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report,"

e January 1981 Forward: Form EIA-14, "Refiners Monthly Cost Report,"

## Appendix A: EIA Weekly Data: Survey Design and Estimation Methods

The Weekly Patroleum Reporting System (WPRS) comprises five surveys: the "Rafinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stocks Report" (EIA-163); the "Crude Oil Stocks Report" (EIA-164); and the "Imports Report" (EIA-165). The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Patroleum Reporting System (JPRS) and the monthly imports system. In the WPRS, selected petroleum compenies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-161 through EIA-164, companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly date end the most recent monthly date from the JPRS are used to estimate the published weekly totals.

#### Sample Frame

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in aither the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and District of Columbia. The EIA-161 semple frame includes all petrolaum refineries in the United States and its territories, industriel facilities that have crude oil distillation capacity and produce some refined petrolaum products, and bulk terminals that blend motor gasoline. The EIA-162 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petrolaum products by tenkar, barge, or pipaline. The EIA-163 sample frame includes all petrolaum product pipaline companies in the United States and its territories that transport refined petrolaum products, including interstate, intrastate and intracompany pipaline movements. Pipaline companies that only transport natural gas liquids are not included in the EIA-163 frame. Only those pipaline companies in the United States and its territorias which transport crude oil, all rafining companies, all crude oil producers, all terminal operators, and all storers of 1,000 barrels or more of crude oil. The EIA-165 sample frame includes all importars of record of crude oil and petrolaum products into the United States and Puerto Rico.

#### Sampling

The sampling procedure used for the weakly system is the cut-off mathod. In the cut-off method, companies are ranked from largest to smellast on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time pariod.

	Rafinars (Rafinaries)	Bulk Terminais	Pipalinas	Cruda Oll Stock Holdars	Importers
Waakly Form	EI A-161	EIA-162	EIA-163	EIA-164	EIA-165
Monthly Frame Siza	186(347)	173	65	296	956
Waakly Sample Size	84(215)	93	65	111	61

#### Collection Mathods

Data ere collected by mail, meligram, talephone, Talex, and Talafax on a weekly basis. All canvessed firms end terminal operating companies must file by 5:00 p.m. on the Mondey following the close of the report period, 7 e.m. Friday. During the processing week, company corrections of the prior week's deta are elso entered.

### Estimation and imputation

After the company raports have been checked end entered into the weekly deta base, ratio astimates of the weekly totals are calculated from the reported date. First, the current weak's date for a given product reported by companies in that region are summed. (Call this weekly sum, W<sub>s</sub>). Next, the most recent month's date for the product reported by those same companies are summed. (Call this monthly sum, M<sub>s</sub>). Finally, let M<sub>t</sub> be the sum of the most recent month's date for the product as reported by all companies. Then, the current weak's ratio astimate for that product for all compenies, W<sub>+</sub>, is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminels, and pipelines. Total estimates are formed by summing over establishment types.

Waskly imports data are highly variable on a company-by-company basis or a week-by-weak basis. Under such conditions, the ratio method is known to result in large errors. Hence, a number of other procedures for astimating weekly imports were considered. The average ratio method was selected for astimating imports because it produces estimates that were close to banchmark values computed from monthly data. Estimates are obtained using the ratio method, but with each company in turn omitted from the sample. These estimates are then averaged to obtain the average ratio astimate.

Since M<sub>1</sub>, the total of the most recent month's data, includes compenies which may not have responded weekly, the ratio method of astimation automatically imputes for nonresponse.

#### Response Rates

The response rate as of the dey after the filing deadline is about 80 percent for the EIA-161; 76 percent for the EIA-162; 95 percent for the EIA-163; 80 percent for the EIA-164; and greater than 96 percent for the EiA-165. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

## Appendix B: Interpretation and Derivation of Average Inventory Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, and residual fuel oil in this publication include features to assist in comparing current inventory levels with past inventory levels and with judgments of critical levels. Methods used in developing the average inventory levels and minimum operating levels are described below.

#### Average Inventory Levels

The charts displaying inventory levels of total petroleum products (p. 7), crude oil (p. 7), motor gasoline (p. 9) distillate fuel oil (p. 11), and residual fuel oil (p. 13) provide the reader with actual inventory data compared to an "average range" from the most recent 3-year period running from Jenuary through December or from July through June. The ranges are updated every six months in March and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges elso reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The Intent of deseasonalization is to remove only annual variation from the deta. Thus, deseasonalized series would contain the same trends, cyclical components, and irregularities as the original deta. The seasonal factors for total petroleum (crude and products), crude oil, distillate fuel oil, and residual fuel oil were derived using monthly data from 1975-1981. For motor gesoline, the seasonal factors were based on monthly data from 1975-1975 and 1978-1981. In 1977, monthly stock levels of motor gasoline stayed at the same high level for the entire year. Since there was virtually no seasonal behavior in motor gasoline stocks that year, 1977 was not used in the determination of seasonal patterns for motor gesoline stocks.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) ere deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized everage band. The standard deviation of the deseasonalized 35-months is calculated adjusting for extreme data points. The upper curve of the "average range" is defined as the average plus the seasonal fectors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the "everage range" is twice the standard deviation. The values of the upper and lower curves ere presented in the teble below.

## Velues of Average Ranges in Inventory Graphs (Millions of Sarrels)

	Jan	Fab	Mer	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
						Lower F	lenge					
Total Petroleum	1185,5	1143.1	1138,6	1149,3	1163.8	1175.9	1204.2	1218.5	1244.2	1250,8	1252.8	1209,4
Crude Oil	347.0	345.5	354,0	358.2	355.5	354.4	348.2	344.4	344,8	352.7	351.4	341.8
Motor Gasoline	253.8	260.1	256,0	245.1	235.8	230,9	229,0	227.6	228.1	221,1	228.6	237.1
Distillata Fuel Oil	181.6	132.0	120,3	121.5	130.3	145.0	167.5	187.7	208,0	212.5	213.0	191.1
Residual Fuel Oil	71.0	87.8	64.8	66.1	69.4	86.7	70.2	70.3	75.1	79.1	79.5	77.6
						Upper R	enge					
Total Petroleum	1301,2	1258.8	1254,2	1265.0	1279.6	1291.6	1319.9	1335.3	1359.9	1366.3	1358.8	1325.1
Crude Oil	377,8	375.3	384.8	388 9	386.2	385.1	379.9	375.1	375.5	383.5	382.2	372.5
Motor Gasolina	279.7	286.1	282.0	271.0	261.8	256.8	255.0	253.5	255.0	247.1	252.8	263.0
Distillate Fuel Oil	205,5	176.9	154.2	165.4	174.2	188.9	211.4	231.6	249.9	265.4	256.9	
Residual Fuel Oil	88.5	85,4	82,4	83.6	86.8	84,3	87.8	87.8	92.6	208,4 96.7	256.9 97.0	235.0 95.1

#### Minimum Operating Levels

The lines lebeled "minimum operating inventory" for crude oil, motor gasoline, distillate fuel oil, and residual fuel oil were derived by the Netional Petroleum Council from a 1978 survey of petroleum refineries, bulk terminel operators, and petroleum pipelines. The Council also surveyed industry experts. The findings were published in "Petroleum Storage and Transportetion Capacities" in December 1878. In that document, minimum operating inventory is described as follows:

Inventory below this level is not aveilable for consumer usa because it is required to fill pipelines, tank bottoms and refinery process equipment; facilitata blending to meet the product specifications; prepare for planned maintenence periods; hendla unavoidable but anticipated emergencies; and sustain uninterrupted operations. Runouts and shortages would begin to occur if inventory were to fall below this level.

The values were: crude oil -- 280 million berrels; motor gasoline -- 210 million berrels; distillate fuel oil -- 125 million barrels; and residual fuel oil -- 60 million barrels.

Since the Netional Petroleum Council did not derive a minimum operating inventory level for total petroleum stocks, the line lebeled "observed minimum" is based on the lowest inventory level observed during the same 3-year base period that was used in the derivation of the average inventory levels. For crude oil, motor gasolina, distillate fuel oil, and residual fuel oil, the observed minimum and the minimum operating inventory are quite close. Hance, it is thought that the observed minimum is a reasonable proxy for the minimum operating inventory.

## Appendix C: Projection of Products Supplied from the Short Term Energy Outlook

The projections of "high" and "low" total petroleum demand, shown in the WPSR as total product supplied, ere from the Office of Energy Markets and End Use, Short-Term Energy Outlook, August 1982 (Outlook)

Three forecast cases are presented in the <u>Outlook</u> based on differing assumptions about the world price of crude oil. In case 1, it is assumed that prices decrease to an effective OPEC marker crude price of \$28 per barrel by the end of 1982 and remain at the level in 1983. In case 2, imported crude oil prices are stable at the July 1982 level through 1982, then rise et the U.S. inflation rate in 1983. In case 3, crude oil prices rise at 2 times the U.S. rate of inflation in 1982 and 3 times the inflation rate in 1983, Macroeconomic inputs are based on a forecast from Data Resources, inc. (DRI CONTROL 072782).

The "high demand" case is formed by adding the case 1 (low price) forecast of total demand to the square root of the sum of the squares of increases in demand resulting from the following changes in key variables: (1) e 5 percent increase in heating degree-days over the base case, (2) a 7 percent increase in cooling degree-days over the base case, (3) en increase in income over the base case that reflects average forecast errors over a 3-year period, and (4) a 5.5 percent decrease in new car efficiency from the base case level in 1982 and 12.6 percent decrease from the base case level in 1983. The "low demand" case is formed by subtracting from the case 3 (high price) forecast the square root of the sum of the squared decreases in demand resulting from decreases from the base case for heating degree-days, cooling degree-days, and income; and a 9.1 percent increase from the base case new car efficiency in 1982 followed by a 17.1 percent increase from the base case in 1983.

For detailed information on the assumptions used in the forecast methodologies, please refer to the published report, Short-Term Energy Outlook, August 1982.

Coples of the report are available from.

National Energy Information Center Room 1F-048, Forrestal Building 1000 Independence Avenue, S.W. Washington, D.C. 20585 Talephone 202-252-8800

### Appendix D Changes in Reporting of Monthly Data—January 1981

In Jenuary 1981, new forms were introduced for the collection of monthly date in the Joint Petroleum Reporting System. At that time, several major changes were made in the reporting of motor gasoline, distillate fuel oil, and residual fuel oil. The reporting changes were made to describe industry operations more accurately. However, because of the changes outlined below, the monthly information shown in the WPSR for 1981 and 1982 should not be directly compared to information for prior years. The series affected by the January 1981 changes are products supplied and production of motor gasoline, distillate fuel oil, and residual fuel oil.

#### Motor Gasolina Chenges

Prior to 1979, the EIA product supplied series for motor gesoline was consistently lower than the gesoline sales information collected by the Federal Highway Administration. There were two major reasons for the difference. First, refinery operations particularly the flows of unfinished oils end the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries et "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA prior to January 1981.

In January 1981, blending stations were added as reporters of motor gasoline production, and the reporting forms and definitions were changed to reflect more accurately the flow of products at refineries. For a further description of these changes and an Indication of the magnitude of the difference between the old- and new-basis series, see Note 4 in the "Explanatory Notes" of the "Petroleum Supply Monthly."

#### Distillate and Residual Fuel Oil Changes

The monthly statistics on production and product supplied of distillate and residual fuel oil for Jenuery 1981 forward reflect actual reported data even though these fuels cen be further processed after initial distillation. The figures for prior years were edjusted to reflect the renaming or reclassifying of distillate and residual fuel oils as unfinished oils. Reclassification of these fuels might occur when a refiner ships a distillate or residual fuel oil to another refinery or to a bulk storage facility and the receiving facility, intending the oils to be processed further, reports the receipt of this fuel as a receipt of unfinished oils. Sefora January 1981, production statistics for distillate and residual fuel oils were adjusted to compensate for this problem on the besis of the difference between reported receipts and shipments of unfinished oils. Of the difference, two-thirds was ellocated to distillate and one-third to residual. This adjustment was dropped in January 1981. Instead, the production statistics and products supplied estimates now reflect the date as reported. Monthly figures for total petroleum product supplied will not be affected by the change, however, because of an adjustment for "reclassified" product now shown in the monthly balance. The edjustments made in 1980 are shown in tha table below. For further information about these changes, see Note 4 of the "Explanatory Notes" in the "Petroleum Supply Monthly,"

Adjusted and Unadjusted Production of Distillete and Residuel Fuel Oils by Month for 1980 (Thousand Berrels per Day)

		Distillate Fuel Oil	1	Residual Fuel OII					
Month	Adjusted	Unedjusted	Difference	Adjusted	Unadjusted	Difference			
Januery	3,013	3,093	80	1,771	1,812	41			
February	2,766	2,888	122	1,773	1,838	63			
March	2,657	2,690	133	1,584	1,652	68			
Aprll	2,460	2,564	94	1,596	1,643	48			
Mey	2,474	2,610	136	1,609	1,579	70			
June	2,646	2,721	75	1,575	1,613	38			
July	2,689	2,783	94	1,480	1,628	48			
August	2,461	2,682	121	1,444	1,606	62			
September	2,588	2,726	40	1.495	1,516	21			
October	2,589	2,650	61	1.512	1,543	31			
November	2,703	2,823	120	1,579	1,641	82			
December	2,891	3,052	161	1,660	1,743	83			
Average	2,661	2,764	103	1,580	1,634	64			

Source: EIA, "Petroleum Supply Monthly," Merch 1982.

## Appendix E: Calculation of World Oil Prices (page 19)

The weighted average international price of oil, shown in the "Highlights" and on page 19, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 19, e list of major oil producing/exporting countries was chosen. For each country, the official selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Bilyers' Guide," "Platt's Oilgram Price Report," "Petroleum Intelligence Weekly," and "Europe Oil Prices") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted everages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative official crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries. Import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate

### Definitions

- Barrels throughout the report are 42-gallon barrels.
- Crude Oil Inputs. The total crude oil put into processing units at refineries. Crude oil inputs are a measure of the performance level of refineries and give an indication of the quantity of raw material actually being made into products such as gasoline, distillate fuel oil, and residual fuel oil.
- Distribute Fuel Oils (No. 1, 2, and No. 4 fuel oils and No. 1 and No. 2 diesel fuels) are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation.
- EIA Weekly Data. These are preliminary figures based on data supplied to the EIA by selected petroleum companies, published figures include estimates for other, non-sampled companies based on currently available monthly data Weekly data indicate broad trends such as increases or decreases in demand or production.
- Imports are defined in this report as gross imports Imports of crude oil do not include imports to the Strategic Petroleum Reserve. Imports of minor products ("othar oils"), as shown on page 15, include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, and other miscellaneous oils
- Monthly Data for 1980 are from EIA, Energy Data Reports, "Petroleum Statement, Annual (Final Summary)." 1981 data are from the "Petroleum Supply Annual;" 1982 data are from the "Petroleum Supply Monthly." Information on stocks, product supplied, and production of refined products are collected from a universe of refiners, operators of bulk terminals, and pipeline operators. Companies supply monthly data after their records are finalized.
- Motor Gasoline. Included are finished leaded gasoline, finished unleaded gasoline, blending components in the gasoline range, and gasohol. This definition applies for data beginning with the week of January 30, 1981 Gasohol was not included in the motor gasoline definition before that date. Motor gasoline imports do not include gasohol.
- Refinery Capacity Utilization is the ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units. In the period 1979-1981 the refinery eapacity utilization for all U.S refineries ranged between 87 percent and 66 percent. The ratio for an individual refinery may fluctuate much more depending on the type of crude and other raw materials processed, the type of products produced, and the operating conditions of the refinery.
- Retail Motor Gasoline Prices. The motor gasoline prices shown are calculated monthly by the Bureau of Labor Statistics (BLS) in conjunction with the

- refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1131. Imported crude oil is either that oil reported on Form ERA 51, the "Transfer Pricing Report," or any crude oil which is not domestic oil. Prices do not include price of unfinished oils or SPR.
- Residual Fuel Oils. (No 5 and No. 6 Fuel Oils) are heavy oils used primarily for electric power generation, for industrial and commercial space heating, as a ship fuel, and for various industrial uses
- Stock figures shown here are for those stocks held at refineries, in pipelines, and at bulk terminals with a capacity over 50 thousand barrels. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded. All plant stocks were included in "Other Oils" and "Total."
- Stock Change (Refined Products). The product stock change shown on the U.S. Patroleum Balance Sheet for the current 4-week period is calculated in the following way. an average daily stock change is calculated for major refined products (i.e., all actual reported stocks); this stock change is added to an estimate for minor product stock change based on historical monthly data; a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used. These other oils stock levels are derived by: 1) computing an average daily rate of stock change for each month based on monthly data for the past six years, 2) using this daily rate and the minor stock level from the most recent monthly publication to estimate the minor product stock level for the current
- Product Supplied is a calculated value computed for specific products by adding domestic production plus net imports (imports less exports), lass the net increase in primary stocks. Total Products Supplied is calculated as inputs to refineries, plus estimated refinery gain, plus other hydrocarbon input, plus product imports, less product exports, less tha net increase in product stocks.
- The United States encompasses, for the purpose of this report, the 50 states and the District of Columbia Data for the Virgin Islands, Puerto Rico, and other U.S territories are not included in the U.S. totals.
- Uneccounted-for crude oil is a term which appears in U.S. Petroleum Balance table. It reconciles the difference between data (or estimates) about supply and data (or estimates) about use. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data on cruda oil imports, production, stocks, refinery input, losses, exports, and transfers (crude oil burned directly as fuel oil). It reflects the quality of the estimates as well as the accuracy of the reported data. Secause the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or astimated data and smaller in balances using the final data. In fact, the published figures confirm this expectation. In the WPSR, fourweek everages for the previous year are Interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous years is considerably smaller than that for the current period.

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